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Adkins, Barbara and Foth, Marcus and Summerville, Jennifer and Higgs, Peter (2007)
Ecologies of Innovation: Symbolic Aspects of Cross-Organisational Linkages in the
Design Sector in an Australian Inner-City Area. *American Behavioral Scientist* 50(7):pp. 922-934.

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RUNNING HEAD: ECOLOGIES OF INNOVATION

ECOLOGIES OF INNOVATION: SYMBOLIC ASPECTS OF CROSS-
ORGANISATIONAL LINKAGES IN THE DESIGN SECTOR IN AN AUSTRALIAN
INNER-CITY AREA

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Abstract

The roles of proximity and locale have been the subject of a growing literature on cross-organisational linkages in the field of Creative Industries. Research to date points to the importance of both community and network dynamics in these practices and their role in fostering group and individual creativity and innovation (e.g., Neff, 2004; Maskell and Lorenzen, 2004; Drake, 2003). This paper seeks to locate these practices in the broader conceptual framework emphasizing the “embeddedness” of these practices (Ganovetter). For this reason it does not focus on the self-evidence of imperatives associated with creativity and innovation, but rather returns to an economic sociology framework to open up questions of what is at stake in these collaborations. We report on a qualitative study of the linking and networking practices and rationales of the design sector collocated in an inner-city area in Brisbane, Australia. The study suggests that the locale was important in both community and network level relationships, but also that these should be understood in relation to symbolic representation in the field (Bourdieu, 1984) of design. The paper argues that the innovative potential of interorganisational linkages need to be understood in the context of layers of symbolic identifications at the level of the field of design, the symbolic community associated with the locale and the awareness space (Grabher) of networks that is required in the context of project and collaboration imperatives.

INTRODUCTION

The rise of the knowledge economy has ushered in a new kind of problem for the traditional firm. The product is no longer tangible, the process is no longer straightforward, and the outcomes – ‘success’ or ‘failure’ – are no longer exclusively defined by the bottom line. The traditional firm that works independently, no longer stands up in comparison with the organisational and professional networks that cross-cut and break down traditional organisational and disciplinary boundaries (Smits, 2004). As such, in the design field, as in others, successful networking has become a core business activity oriented to establishing the relationships, contacts, and interactive capacities necessary for knowledge integration and ideally, innovation.

Consistent with more general theories on the ‘network society’ and the ‘knowledge economy’, modern innovation is seen as inseparable from the networks and organisational relationships through which it is produced. Networking activities supported by horizontal and flexible inter-organisational policies are thereby viewed as crucial for generating the conditions under which knowledge integration and innovation can occur (Smits, 2002).

In light of the shift away from traditionally hierarchical and insular institutional structures, since the early 1990s innovation studies have developed a distinct concern with the role of inter-organisational networks in innovation processes. To date, these studies have been dominated by geographic and regional economic perspectives, resulting in a concentration of research that emphasizes the salience of proximity for innovation networks (Deloreux, 2004). Whether conceived in terms of the ‘innovative milieu’, ‘industrial district’, ‘learning region’ or ‘industrial cluster’, the significance of proximity is generally associated with its capacity to facilitate the integration of “resource[s], knowledge, and other inputs and capabilities that are localized in specific places” (Deloreux, 2004, p. 175). Rationales for this vary from functional, resource-based, accounts – whereby close geographic location

enhances firms' capacity to access, coordinate and integrate resources (reference) – to socio-cultural accounts – where shared local conditions and culture are seen to facilitate 'tacit' and 'codified' knowledge flows (Asheim, 1999; Storper, 1997) and engender relationships of trust and reciprocity. However, the tendency to *presume* a causal or necessarily beneficial relationship between proximity and innovation networks has been widely challenged. Most frequently noted is that assertions of a causal correlation between proximity, networks and innovation lack an empirical foundation (see for example, Oermelans *et al.*, 2001; Deloreux, 2004; Staber, 2001; Larrson & Malmberg, 1999). This has led some to observe a somewhat circular logic such as that identified by Larrson & Malmberg (1999) in their discussion of the 'innovative milieu' approach. They state that:

The co-location of actors in space is taken as evidence of the existence of mutual relations and interdependence. Accounts of cumulative causation run the risk of ending up arguing that 'innovations take place in regions where there exists an innovative milieu, while innovative milieus are those where innovations take place. (Larrson & Malmberg, 1999, p.1)

Coenen *et al.* (2004, p. 1005), in their discussion of Regional Innovation Systems (RIS) warn that the "argument that proximity makes interaction better, faster, easier and smoother... runs the risk of spatial fetishism" whereby 'space' is assigned a privileged position over the social objects, processes and relationships that constitute it. Extending this argument – even when socio-cultural factors such as tacit knowledge, trust, etc. have been used to explain the significance of proximity – tends to imply that proximity produces or facilitates culture, and remains blind to the possibility that culture produces and defines proximity and the nature of its significance in different contexts. The latter case is no better exemplified by the fact that geographic delineations are in the first place a product of social and historical conditions .

Critiques such as these are based on an appreciation that innovation networks and processes are ‘embedded’ within socio-cultural contexts, rather than nondescript, asocial spaces. Stemming from an economic sociology perspective, and more specifically the work of Granovetter (1985), embeddedness generally refers to the tendency for economic activity, like any social action, to be intertwined with – ‘embedded’ within – networks of social relations and structures. The concept of ‘embeddedness’ is widespread in innovation and economic literature, leading some to suggest that the excessive concern with social networks and relations has resulted in the market being taken-for-granted (Krippner in Krippner *et al.*, 2004). However, we propose that these arguments do not necessarily reflect a problem with the concept of ‘embeddedness’ itself, but rather are symptomatic of the way it has often been superficially or selectively applied. The use of socio-cultural explanations for the ‘proximity effect’ stands as a neat example of this. Ironically, so too do common approaches to social network analysis purportedly founded on the appreciation that market activity is ‘embedded’ within networks of social relations. To date there has been a tendency to limit the study of social networks to the quantitative analysis of ‘weak’ and ‘strong’ ties, usually at the inter-organisation level (Grabher, 2004). Further, in this framework, the identification of empirical patterns of networks is then interpreted as representing embeddedness.

In contrast, our research is underpinned by the understanding that the concept of embeddedness is analytical in nature. We propose that it was not intended to be something that researchers might find in the field and subject to analysis. Rather, embeddedness is itself an analytical concept, founded on insights from economic sociology, that depicts the socio-cultural nature of the field itself. For our purposes, the concept of embeddedness provides an opportunity to examine and problematise assumptions pertaining to the nature of networks in the field of economic life. For example, at the core of the notion of networks in the economic field is potentially a key contradiction. Frameworks involving economic modeling tend to

assume economic interest, and specifically the interest of the firm, to be paramount in explanations of economic practice. In game theoretic terms the problematic nature of this for collective economic goals is illustrated in the prisoner's dilemma, where individual self interest of prisoners prevents sufficient collaboration needed for an orderly escape for all. Formulated this way the contradiction might be seen in terms of a contradiction between the self interest that is understood as the logic of economic practice and the 'other interest' needed to achieve collective economic goals. Given that proximity is invoked as a means of engendering economic collaboration, we must then ask if and how this problematic is relevant to everyday networking practices in these contexts.

At a substantive level, the concept of embeddedness provides for a focus on the practices and contexts involved in linkages that opens up, rather than assumes, the logic and motivations involved. Analytically, in order to study this, this perspective enables a focus of these interactions at the level of the network, that is, the "middle ground between larger cultural and political and economic phenomena at the macro level of institutions and individuals at the other side" (Granovetter in Krippner *et al.*, 2004, p. 116). Thus the framework of embeddedness and the analytical focus at the level of the network provides a conceptual framework through which to raise questions about whether or how market or economic imperatives are appropriated by or intersect with broader socio-cultural contexts on the one hand, and individual motives and rationalities on the other.

METHODOLOGY

The data for this study was collected through focus group discussions with design professionals based in an inner-city area in Brisbane Australia. The inner Brisbane suburb of Fortitude Valley is the location for 1.17% of Queensland's and 2.17% of Brisbane's total number of businesses as registered with the Australian Business Register. The core design industries of Architectural Services and Photographic Studios have double this proportion.

When the number of industries that are related to design are included such as Creative Arts, Museums and Art Galleries, Art Dealers, Business Services n.e.c., Technical Services n.e.c., Consulting Engineering Services and related manufacturing, wholesaling and retailing operations then design is connected to 14% of the Valley's number of business versus 8.7% of Brisbane's (Australian Business Register as at September 2005). From a statistical perspective these figures would readily imply that clustering effects are at work.

In addition to this, Fortitude Valley as the location of a creative industries cluster is widely promoted through Queensland State and local policies that frequently single it out for its traditionally eclectic and alternative character. For example, the Fortitude Valley Strategic Plan, describes the Valley as a creative industries hub and espouses a commitment to "supporting creative industries in the broadest sense". Implicitly, the "diversity" and "edginess" associated with "the Valley" is seen as conducive to supporting creative industries. The State Government 'Smart State' framework builds on this idea connecting the generic importance of 'creating conducive environments' with the capacity to 'build cultures of innovation' (Queensland Government, 2000). Within this policy setting, the strategic fostering of proximity-based relationships seen as conducive to innovation in the creative industries has become an important part of Fortitude Valley's socio-cultural and economic context.

For the purposes of our study, then, the design sector professionals in Fortitude Valley represented an opportunity to study practices in predominantly smaller firms collocated in an area committed in its strategic plan to developing the creative industries, including its linkages with the Creative Industries precinct at Kelvin Grove – another Brisbane suburb. It was proposed that these characteristics would intensify a focus on building relationships entailed in cluster networking processes, based in an environment with an explicit policy focus and in a sector characterised by smaller firms. A set of questions were devised to probe

various dimensions salient to an understanding of the nature and quality of linkages in business networks in a selected locality. The questions were organized in three levels at which interactions between business sectors were significant – the levels of the industry, the firm and the individual.

Questions were framed around the nature and quality of network linkages, the ‘tangible’ business interests [the outcomes] of linkages and participants’ individual practices in linkage networks. The interview questions were designed to elicit information on the nature of different kinds of linkages with clients, other sectors and other firms in the same sector. Across these different levels of linkages, specific themes associated with the practices and motives associated with them were explored: Nature of linkages, purpose of partnering; Maintaining and managing connections; Process of establishing connections; Change over time; Importance to growing the business; and the Importance of networks to attracting business.

DISCUSSION OF RESEARCH FINDINGS

An examination of respondents’ descriptions revealed a range of logics and practices associated with linking activities. These pointed to different levels of social and cultural orientations and motives associated with interorganisational linkages and each of these intersected with “The Valley” as a cultural context. First, the valley was salient in relation to participants’ identification with a symbolic community. Further, however, identification with this community was also important in broader symbolic orientation in the field (Bourdieu, 1984) of design. Second, the everyday basis for this identification was seen in terms of collaboration in projects. Here the valley was important as resource underpinning networking practices and events associated with ‘project awareness’ (Grabher). In this respect, the discussion points to various levels and configurations of embeddedness that operate symbolically. The paper now turns to a discussion of these aspects of the data.

The Valley as a Symbol of the Design Field

Whether they were discussing matters associated with the firm and business or linkages with clients and other organisations, the respondents continually contextualized the activity in terms of their location in “The Valley”. While the importance of economic benefit was implicit in some of the responses, the rationales for moving to and remaining in this locale were articulated in terms of symbolic advantages associated with the Valley. More specifically, the character of the Valley was seen as an appropriate personification of the creative disposition associated with the field of design. Consider the following extract as an example of the elements involved in these motives:

Extract 1:

10 years ago we started off in the city in a high rise building so it was fairly non descript for a studio to be in that kind of environment, so that’s why we decided to move to the Valley because it is a more appropriate place for a young design studio to be located....I think the design profession has certainly grabbed onto the Valley they didn’t want to be stuck in a high rise, a non descript high rise, non descript character. Office, office presence presentation - business is important in the Valley – it gave us all that. We adopted some of the character that was already in the Valley and we brought new character too, I think. So there’s a real exchange that’s happening there in the design sense which is important.

In this extract, two scenes are contrasted: the “city” or central business district, and the “Valley”. The notion of ‘fit’ between a “young design studio” and the valley is quite explicit, however the symbolic logic underpinning it is inferential. “Non-descript high rise” accommodation, associated with the central business district, is contrasted with another kind of office presentation involving the capacity to adopt some of the character of “the Valley”. Of course, implicitly, location in the Valley could be understood as an underlying rationale

for an individual firm to attract business. However, in this case, and in much of the talk from other respondents, the symbolic advantage afforded by the character of the Valley to shape their image and character was paramount. In this respect, the Valley offers a ‘scene’ within which designers can represent themselves in a way which they see as symbolically appropriate to the design field. This symbolic identification is highlighted in Extract 1 through the shifting use of the term ‘we’.

In the beginning of the extract, the term “we” is used to index the members of an individual firm – a “young design studio”. Here, the respondent speaks as a member of the firm. However, later in the utterance a shift in footing occurs (see Goffman, 1981) where it is the “design profession”, not the individual firm, that has “grabbed onto the Valley”. Hence the appropriateness of the Valley for the “design studio” can be linked to a broader association between the Valley and the design field in general. In this respect, the fragment *“We [indexing the “design profession”] adopted some of the character that was already in the Valley and we brought new character too”* infers an affiliation with the creative practice of design and the Valley as a locale of symbolic significance. In essence then, the relevance of location for respondents cannot be simplified to involve a straight-forward relationship between industry co-location, networking and ultimately economic rewards. Rather, the location itself is seen to have symbolic attributes that align with ‘what designers do’ and ‘who designers’ are.

In his essay, “Footing”, Erving Goffman illustrated the analytical benefits of examining the participation format, or footing of talk, where the relationships of production and reception of talk were given analytical attention. This framework highlights what is at stake in different kinds of utterance production. One form involves being the animator, or voice box, of the thoughts utterances or practices of another where descriptions convey what someone else has said or done. The extract above, however, reflects another kind of

positioning where the speaker is the ‘author’ or source of the material, implying first hand access to it. Thus, while the “we” referred to initially appears to index the ‘design studio’, this reference changes later in the utterance to include the “design profession in the valley”. In this respect, the fragment *“We adopted some of the character that was already in the Valley and we brought new character too”* infers some affiliation with the “design profession in the valley”. This works to imply access to a sense of the collective experience of design professionals in the valley, and warrants the commentary *“So there’s a real exchange that’s happening there in the design sense which is important”*. This shift in reference thus suggests a sense of a shared identity and sense of commonality in the context of the symbolic aspects of ‘the valley’ in the utterance.

The Valley and the Symbolic Community of Designers

During focus group discussions, the significance of the Valley as a marker of the design field, was underpinned by a sub-set of references that denoted a second layer of symbolism associated with the existence of a symbolic community of designers. It is at this level that the functionality of co-location is emphasized in terms of the activities associated with ‘doing business’. However, the symbolic dimension of proximity still remains an important part of the interorganisational linkages that are evident amongst design firms in the Valley. The following utterance illustrates this symbolic orientation on the part of another respondent in the context of a discussion on apparently functional aspects of working as a design professional in the valley.

Extract 2:

.. you could live work and play, all in the one residence, all in the one area.

That was fantastic to the design professionals, some of the earlier warehouse conversion, etc, have all been done by architects, landscape architects, graphic designers and artists and others. So I think that really set a bit of a pace up for the Valley to change. And now, it’s really by association proximity is very important to

us and to other professionals ...that we are not far away. We can drop everything and be up there in 10 minutes that sort of response is very important to our clients

At one level this description foregrounds advantages of working in the valley for design professionals in terms of the capacity to “live work and play” in the one area and the idea of proximity – of not being far away – from clients. However, at another level there are clearly significant symbolic dimensions. The rationales associated with proximity and functionality are described in the context of a common set of orientations associated with the design field, and specifically members of the Valley design community. This is exemplified in this respondents’ reference to the “*architects, landscape architects, graphic designers and artists*” who have played role in the conversion of local warehouses and who have “*set a bit of a pace up for the Valley*”., In this way, the local design community are construed as having influenced the Valley through their design work. Here the functional aspects of work in the valley themselves constitute resources for a sense of common cultural rationales for location there. In this respect, the benefits of sharing a locale are underpinned by a sense of commonality or community at a symbolic level, The relationships and dynamics observed in this utterance therefore suggest that symbolic relationships may be critical to processes of interorganisational linkages in a common locale.

The Valley and Project Awareness Space

However, while descriptions in the data extract clearly appear to reflect a community orientation, they raise the question of the basis for common identification. We have seen from the data examples that symbolic identifications of the Valley, the design field and the Valley design community are not purely a reflection of common geographic location, but rather draw on aspects of collocation as *resources* in descriptions of shared orientations. However, a significant question remains: in what context do these commonalities become salient? The focus group data supported Grabher’s work in consistent references to ‘the

project’ as a context for linkages to which respondents continually returned throughout the discussions. The following two extracts together suggest a role for the Valley in a level of relationships distinct from the tangible project team, and firm, which Grabher (2004) refers to as an “awareness space”.

Extract 3:

I try to submit the projects with artists in the same way I might with the landscaper ...and my point with the network is the only way that really works is that I have to build up a knowledge of people - of artists that are around and I have to keep making it my role to keeping finding who is around. So my networking is part of my self education. I can’t do my work unless I have an awareness of the artists....how can you do it?

Extract 4:

[Our work was] under the policy and it had to be a straight fair assessing process between 20 artists. We thought about the sites and we looked at the work in a non judgmental way. That was step 1. Step 2 – {Artist’s name} had an exhibit in the Institute of Modern A art at the time so we saw what he was doing. Timing was right.

In extract three, the respondent, an architect, is referring to a State government policy in relation to the inclusion of public art in developments. The description focuses on the need to submit projects and refers to a logic pertaining to *anticipation* of the need to submit them with artists. This requires that he has to keep “finding who’s around”. Extract four is an utterance from the same respondent. Here, the task of finding who’s around is given a spatial context. The artist that was selected for inclusion in the project was first identified through an exhibition at the Institute of Modern Art located in the Valley, which clearly the respondent attended. These utterances indicate another symbolic level associated this time with networking and pertaining not to projects themselves but to the awareness space (Grabher,

2004) needed to draw together project teams when necessary. Seeing the work of an artist at The Institute of Modern Art in the Valley appears to have two dimensions worth considering in relation to processes associated with project awareness. The artist's work was seen in a Valley artspace considered to be *avant garde* and thus characteristic of the Valley. In this respect it was the site for exhibition of specific types of art. Further the fragment at the end of extract four "*so we saw what he was doing. Timing was right*" suggests that it was because of its location at the Institute of Modern Art that 'we' saw what the artist was doing. In this respect there is clearly an inference about the location of the exhibition and in this kind of artspace that was consequential for its being seen, presumably by the respondent and other firm or project team members. The utterance *Timing was right* also suggests that the locale may play a part in temporal aspects of awareness.

CONCLUSIONS

The study's findings are twofold. They address

1. the complex interrelationships between symbolic communities and the awareness aspects of project networks; and
2. the idea of embeddedness and what it adds to our understanding of debates around market vs cultural orientations, and the role of place in this.

With respect to the first point, the interactions we observed and those that were self-reported by the study participants were both face-to-face and internet-mediated. However, it is the aspect of computer mediated communication, mostly via the Internet, which enabled individuals in the design sector to become active communication agents in their own right and to establish socio-professional networks around projects and project teams. These findings allow us to propose a conceptual model which departs from the conventional perspective that regards a physically collocated number of businesses as a 'hotspot', 'cluster', or 'industry precinct'. Current public interest and economic investments in such precincts is

driven by a network analysis based on physical proximity where an individual business represents a node and the physical distance between collocated businesses represents professional network ties.

Based on our findings, we propose a network analysis founded on the notion of social proximity (Figure 1). Projects and project teams are the nodes in such a network, and the links between nodes are made up of value chain relationships between these projects. Each node is embedded into a socio-professional milieu that comprises team members, clients, suppliers, users and other key stakeholders. The ‘communicative glue’ that enables the flow of information and collaborative activity is provided by electronic means of communication as much as it is by the convenience of physical proximity and resulting face-to-face interactions. Yet, the symbolic community that the image of a project network depicts has inherently different implications for public economic policy and investment than the traditional image of a business community as a collocated cluster.

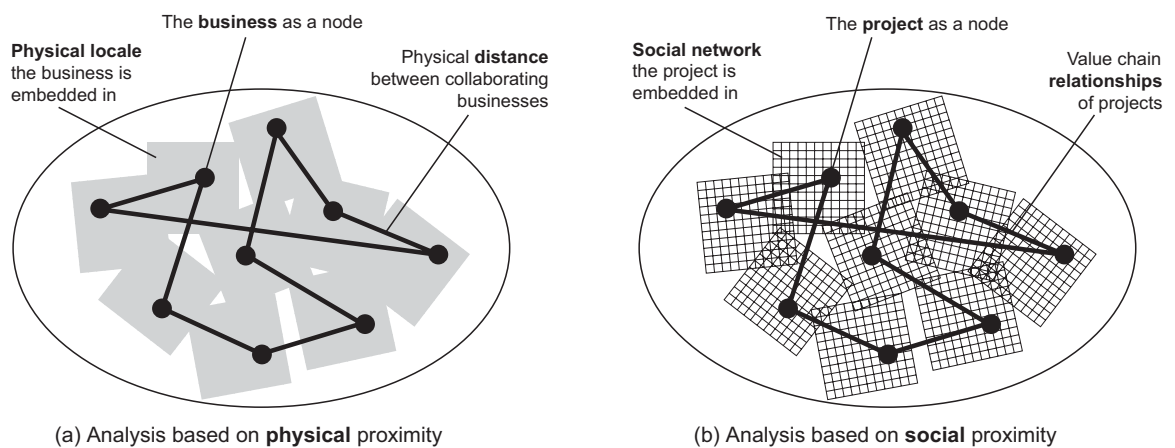


Figure 1: Physical proximity vs. social proximity

One of the key differentiators in these two models is the notion of embeddedness. It functions here as a basis for asking questions about the nature of relationships involved in clustering in the context of everyday practices and logics of those working in the creative industries (Hartley, 2005). As a component of a larger Creative Industries Clustering study, we saw the statistical identification of a creative industries cluster in an inner-city area in

Queensland, Australia, as an opportunity to explore, through focus groups, the way in which design professionals, delineable as members of the cluster, perceive and rationalize their collocation and networking activities.

In regards to the second point, focusing on the role of locale and proximity in linking practices has led to some further insights into the analytical contribution of the notion of embeddedness. The study of linking activities in a specific locale creates a ‘problem raising situation’ that is useful when examining the interplay between market and socio-cultural imperatives, because it requires actors to reconcile these aspects of organizational work in specific settings and contexts. This places the relationships between communities and networks in a framework which varies somewhat from current approaches to issues of interorganizational relationships and locale in the creative industries.

An important set of orientations on the part of study participants in linking practices had a strong symbolic character. The symbolic orientations were not opposed to - nor did they exclude – market and commercial considerations. In the utterances discussed in the previous section, it was clear that the imperatives around presentation and impression management as well as the logics associated with project awareness were implicitly oriented to outcomes in the field of economic life. However, it was also apparent that in the context of issues associated with the field of design these orientations took on a life of their own. In relation to the data extracts illustrating ‘community’ orientations, “The Valley” functioned as a resource – a scene in which certain strategies were considered appropriate and indeed were enhanced in that context. It was also important to note, however, that in relation to the notion of community, the data suggested two levels of embeddedness. While it was clear that the utterances displayed access to the orientations and practices of Designers in the Valley as a symbolic community, a broader affiliation was also apparent. This was identified as a sense of normative connection to the broader field of design and the assertion of specific positions

within this field. While there was clearly a discrete orientation to designers in the valley, then, there was also a sense in which the valley functioned as a resource for a broader set of symbolic orientations in the field of design. The concept of field in itself has the potential to add insights to debates on embeddedness with respect to market vs socio-cultural practices and motivations.

Bourdieu's framework proposes that experience must be understood analytically in terms of one's position in social space an abstract system of social relations – but also in terms of applications of habitus. As a set of dispositions, habitus is “a socialized body, a structured body, a body which has incorporated the immanent structures of a world and which structures the perception of that world as well as action in that world” (Bourdieu, 1998, p. 81). The habitus comprises inculcated schemes of action in the form of embodied, pre-reflective dispositions that are applied in practice: It “continuously generates practical metaphors, that is to say transfersrequired by the particular conditions in which the habitus is ‘put into practice’” (Bourdieu, 1984, p. 173). For Bourdieu, applications of habitus occur in the context of fields or social domains of activity. The concept of field was introduced as a key dimension of his three dimensional model, providing a focus on the way one's position in social space and habitus were applied in a specific domain. In the context of field, the acquisition of various kinds of capital had an important influence on the extent to which social actors could compete for, gain and maintain positions. This focuses attention on the possibility that there may be various forms of capital at stake in asserting positions in a field, and raises the question of the interrelationships between them.

The data we reported on in this study pointed to the salience of symbolic capital at various levels: the field, the ‘community’ and the awareness spaces pertinent to networking practices. This suggests that studies of creativity and innovation, particularly in the context of specific locales, may benefit from a framework that takes into account various levels of

symbolic identification and their subtle relationships with market constraints. This would appear to be a framework that allows these identifications to be understood in the context of “symbolic imperatives” that characterise the more fluid associations of post-traditional organisational arrangements.

ACKNOWLEDGEMENTS

This research was supported under the Australian Research Council’s Linkage funding scheme (project number LP0453652).

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